## Abstract of CITATION 4.



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## (54) DISK DEVICE

## (57) Abstract:

PROBLEM TO BE SOLVED: To provide an optical disk player capable of shortening a seeking time by making use of the characteristic of the disk and a simple structure, and providing sufficient accuracy even for a wide-ranging operational frequency.

SOLUTION: A D/A converter 13 having rough frequency resolution and a D/A converter 18 having fine frequency resolution are subject to signal processing somehow by frequency control and control. Accordingly, a wide-ranging phase operational frequency is accurately reproduced by the two inexpensive D/A converters even if they are digital PLL. Also, by using a wobbling signal for frequency control, which is sufficient if subjected to tracking control, and controlling the dynamic ranges of the D/A converter having rough frequency resolution and the D/A converter having fine frequency resolution at a time which cause no problems for data reproduction, a frequency is pulled in by the frequency control at a high speed

before the CLV control of a motor is established, clocks locked continuously in data by phase control are generated, and a seeking time is shortened.

